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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/629,682

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Mark Koops

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EXAMINER

MURRAY, DANIEL C

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/629,682	<b>Applicant(s)</b> KOOPS ET AL.	
	<b>Examiner</b> DANIEL C. MURRAY	<b>Art Unit</b> 2443	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 AUG 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-2 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2 and 5-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claim 14** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose that the particular equipment type is selected based on their capacity as recited in **claim 14** and is therefore considered new matter.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claim 13** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 13** states: The network management system claimed in claim 1, wherein *the equipment rules* are used to model how *the equipment rules* must be selected for a particular equipment type. It is unclear how the equipment rules are used to model themselves; it is assumed for examination purposes that the equipment rules are used to model how technology rules must be selected.

Art Unit: 2443

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. **Claims 1-2 and 5-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Galis et al. (US Patent # 5,175,800)** in view of **Carter (US Patent # US 7,130,898 B2)**.

Art Unit: 2443

a) Consider **claim 1**, Galis et al. clearly show and disclose, clearly show and disclose, a network management system for implementing a service on a network (abstract, column 5 lines 38-49, column 9 lines 25-30, column 11 lines 23-30), said network management system comprising: means for transmitting the determined commands to network elements of the network (abstract, column 5 lines 45-49, column 11 lines 54-60); and means for inferring said policy rules in order to determine said commands (figure 9b, column 13 lines 23-33, column 32 lines 7-11); and implementation rules (column 14 lines 21-35 lines 38-42, column 17 lines 58-63), wherein said implementation rules comprise technology rules and equipment rules (figure 9b, figure 9c, abstract, column 14 lines 21-35 lines 38-42, column 17 lines 58-63, column 46 lines 40-66, column 47 lines 25-29), and wherein the technology rules model expert know-how and specify how to determine technology to use in the service being created based on stored attributes of equipment in the network (abstract, column 24 lines 8-16, column 42 lines 40-53, column 46 lines 40-66, column 47 lines 25-29). However, Galis et al. does not specifically disclose means for acquiring policy rules for configuring said service; means for determining commands corresponding to said policy rules; wherein said policy rules comprise services rules which create a service in the network, implementation rules for creating said service and stored attributes of the service.

Carter shows and discloses a mechanism for facilitating the invocation of a service, wherein Carter discloses a means for acquiring policy rules for configuring said service (abstract, column 2 lines 8-28); means for determining commands corresponding to said policy rules (abstract, column 2 lines 8-28); wherein said policy rules comprise services rules which create a service in the network (abstract, column 2 lines 8-28, column 3 lines 13-46, column 4 lines 56-67, column 5 lines 1-14), implementation rules for creating said service (abstract, column 2 lines 8-28, column 3 lines 13-46,

Art Unit: 2443

column 4 lines 56-67, column 5 lines 1-14) and stored attributes of the service (column 3 lines 13-34, column 9 lines 47-67, column 10 lines 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate invocation of a service, as taught by, Carter into the system of Galis et al. for the purpose of simplifying the invocation of a service (Carter; Column 2 lines 50-56).

b) Consider **claim 2**, and **as applied to claim 1 above**, Galis et al. as modified by Carter clearly show and disclose, the network management system claimed in claim 1, wherein said inference means comprises an inference engine provided in the network management system and external to the network comprising the network elements (figure 9B, abstract, column 13 lines 23-33, column 32 lines 7-11).

c) Consider **claim 5**, and **as applied to claim 1 above**, Galis et al. as modified by Carter clearly show and disclose, the network management system claimed in claim 1, wherein the service rules are provided externally from the network management system and wherein the service rules specify conditions and timing for creating the service (figure 9b, column 5 lines 38-45, column 9 lines 30-45; Carter abstract, column 1 lines 41-62, column 2 lines 8-28, column 4 lines 27-51 lines 56-67, column 5 lines 1-15).

d) Consider **claim 6**, and **as applied to claim 1 above**, Galis et al. as modified by Carter clearly show and disclose, the network management system claimed in claim 4, wherein the technology rules specify which protocol to use for the service based on the attributes of the equipment in the network (column 14 lines 60-67) and wherein the equipment rules model how to select the technology rules based on the attributes of the equipment (column 17 lines 58-63).

e) Consider **claim 7**, and **as applied to claim 1 above**, Galis et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service is created via the

Art Unit: 2443

service rules independently from specifications of equipment and technology specified in the implementation rules (figure 9b, column 9 lines 30-45, column 13 lines 11-17, column 17 lines 58-63, column 46 lines 40-66, column 47 lines 25-29) and wherein the implementation rules are dynamically implemented after the determining means determines applicable implementation rules (column 13 lines 21-33, column 46 lines 58-66, column 47 lines 25-29).

f) Consider **claim 8**, and **as applied to claim 1 above**, Galis et al. as modified by Carter clearly show and disclose, the network management system claimed in claim 1, wherein the service is created via the service rules by an operator without requiring specific knowledge of equipment and technology of the network for the service (Carter; abstract, column 2 lines 50-56 lines 8-28, column 3 lines 28-33).

g) Consider **claim 9**, and **as applied to claim 1 above**, Galis et al. as modified by Carter clearly show and disclose, the network management system claimed in claim 1, wherein the implementation rules specify implementation specific details of the service (Carter; abstract, column 2 lines 8-28, column 3 lines 13-46, column 4 lines 56-67, column 5 lines 1-14).

h) Consider **claim 10**, and **as applied to claim 1 above**, Galis et al. as modified by Carter clearly show and disclose, the network management system claimed in claim 1, wherein the implementation rules specify attributes of the service (Carter; abstract, column 2 lines 8-28, column 3 lines 13-33).

i) Consider **claim 13**, and **as applied to claim 1 above**, Galis et al. as modified by Carter clearly show and disclose, the network management system claimed in claim 1, wherein the equipment rules are used to model how the equipment rules must be selected for a particular equipment type (column 17 lines 58-63).

Art Unit: 2443

8. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Galis et al. (US Patent # 5,175,800)** in view of **Carter (US Patent # US 7,130,898 B2)** and in further view of **Newton (Newton's Telecom Dictionary, VPN, page 982-983)**.

a) Consider **claim 11**, and **as applied to claim 1 above**, Galis et al. as modified by Carter clearly shows and discloses, the network management system claimed in claim 1. However, Galis et al. as modified by Carter does not specifically disclose the service is a virtual private network.

Newton shows and discloses that a virtual private network is a service that can be implemented on a network (Newton, definition of VPN (virtual private network) page 982-983).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Newton into the system of Galis as modified by Carter for the purpose of creating a service on a public network with the characteristics of a private network.

9. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Galis et al. (US Patent # 5,175,800)** in view of **Carter (US Patent # US 7,130,898 B2)** and in further view of **Ballantine et al. (US Patent # US 6,446,123 B1)**.

a) Consider **claim 12**, and **as applied to claim 1 above**, Galis et al. as modified by Carter clearly show and disclose, the network management system claimed in claim 1. However, Galis et al. as modified by Carter does not specifically disclose the technology to be used is determined based on a number of sites involved in a particular network.

Ballantine et al. show and disclose monitoring network performance, traffic, inventory, breakdown, repair activity, and other conditions, alerts a user to anticipated problems based upon



Art Unit: 2443

projection of performance and related data, wherein the technology to be used is determined based on a number of sites involved in a particular network (abstract, column 5 lines 35-62).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate determining the technology to use based on network information (i.e. network inventory), as taught by, Ballantine et al. into the system of Galis et al. as modified by Carter for the purpose of planning based on network information (Ballantine; column 5 lines 35-44).

10. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Galis et al. (US Patent # 5,175,800)** in view of **Carter (US Patent # US 7,130,898 B2)** and in further view of **Abaye et al. (US Patent # US 7,024,475 B1)**.

a) Consider **claim 14**, and **as applied to claim 1 above**, Galis et al. as modified by Carter clearly show and disclose, the network management system claimed in claim 1. However, Galis et al. as modified by Carter does not specifically disclose the particular equipment type is selected based on their capacity.

Abaye et al. show and disclose performance modeling of a communications system, such as one that provides for communications of streaming data, wherein the particular equipment type is selected based on their capacity (column 1 lines 64-67, column 2 lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate selection of equipment based on their capacity, as taught by, Abaye et al. into the system of Galis et al. as modified by Carter for the purpose of proper network planning when deploying a communications systems (Abaye; column 1 lines 64-67, column 2 lines 1-10).

Art Unit: 2443

***Response to Arguments***

11. Applicant's arguments with respect to **claim 1-2 and 5-11** have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- |                      |                      |
|----------------------|----------------------|
| ➤ 5,761,432          | ➤ US 2004/0003065 A1 |
| ➤ 6,108,309          | ➤ US 2007/0258422 A1 |
| ➤ US 2003/0133556 A1 | ➤ US 7,024,450 B1    |
| ➤ US 2005/0010659 A1 | ➤ US 2005/0165906 A1 |
| ➤ US 2005/0050193 A1 | ➤ US 6,711,137 B1    |
| ➤ US 6,954,788 B2    |                      |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL C. MURRAY whose telephone number is 571-270-1773. The examiner can normally be reached on Monday - Friday 0800-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571)-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2443

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DCM/

Examiner, Art Unit 2443

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2454